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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/834,480	04/13/2001	David Easter	28656.26	3587

7590 07/02/2004

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EXAMINER
NGUYEN BA, PAUL H

ART UNIT	PAPER NUMBER
2176	

DATE MAILED: 07/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/834,480	EASTER, DAVID	
	Examiner	Art Unit	
	Paul Nguyen-Ba	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 December 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 April 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Notice to Applicant

1. This action is responsive to Change of Address / Power of Attorney, filed on November 1, 2002.

2. Claims 1-9 have been considered. Claims 1, 4, and 7 are independent claims.

Priority

3. Applicant's claim for benefit under 35 U.S.C. 119(e) of U.S. Provisional Application No. 60/198,696, filed on 4/20/2000 is acknowledged.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-6 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter (i.e. computer program per se). Claims need to be directed towards a "computer-implemented" method. The language of the claim raises a question as to whether the claim is directed merely to an abstract idea that is not tied to a technological art, environment, or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. §101.

To expedite a complete examination of the instant application the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

8. Claims 1-3 are rejected under 35 U.S.C. 102(a) as being anticipated by Sun Microsystems ("Sun"), *Java 3D API Specification*, Version 1.1.2 (June 1999) *available at* http://java.sun.com/products/java-media/3D/forDevelopers/j3dguide/j3dTOC.doc.html.

Independent Claim 1

Sun teaches a method for *defining one or more reusable graphical objects with assignable attributes in a computer graphics scene* (see generally chapter 6 → Reusing Scene Graphs and chapter 7.1 → Attributes), the method comprising:

defining at least one graphical object with at least one assignable attribute in its first instance added to the graphics scene (see chapter 6.2, 1st paragraph *et seq.* → i.e. object = a car; attribute = color) and

adding a second instance of the graphical object with the value for the at least one assignable attribute identified based on the need of the graphics scene (see chapter 6.2, 2nd

paragraph *et seq.* → the *cloneTree* method allows the programmer to change some attributes in a scene graph, while at the same time sharing the majority of the scene graph geometry),

wherein the first and second instances of the graphical object share a predetermined set of fixed attributes of the graphical object (see chapter 6.2, 2nd paragraph *et seq.* → an application developer may wish to reuse a common subgraph without completely sharing that subgraph).

Claim 2

Sun teaches the method of claim 1 further comprising providing an *initial value to each assignable attribute* (see chapter 7.1 *et seq.* → a floating-point or integer value is associated with an attribute).

Claim 3

Sun teaches the method of claim 1 wherein the step of adding further comprises *detecting the assignable attribute* (see chapter 6.2.1; see also Fig. 6-2 → these methods set a flag that controls and detects whether a NodeComponent object (i.e. assignable attribute) is duplicated or referenced on a call to *cloneTree*).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 4-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sun Microsystems ("Sun"), *Java 3D API Specification*, Version 1.1.2 (June 1999) *available at* http://java.sun.com/products/java-media/3D/forDevelopers/j3dguide/j3dTOC.doc.html.

Independent Claim 4

Sun teaches a method for reusing a graphical object in a computer graphics library with one or more assignable attributes, the method comprising:

providing initial values for the assignable attributes (see chapter 7.1 *et seq.* → a floating-point or integer value is associated with an attribute);

identifying at least one assignable attribute of the graphical object expected to be altered when an instance of the graphical object is used (see chapter 6.2.1; see also Fig. 6-2 → these methods set a flag that controls and detects whether a NodeComponent object (i.e. assignable attribute) is duplicated or referenced on a call to *cloneTree*); and

altering the attribute value of the graphical object for the used instance (see chapter 6.2, 2nd paragraph *et seq.* → the *cloneTree* method allows the programmer to change some attributes in a scene graph, while at the same time sharing the majority of the scene graph geometry),

storing an entity containing only the assignable attributes while sharing other attributes as defined by the object (see chapter 6.2, 2nd paragraph *et seq.*).

Sun does not specifically teach the method wherein the used instance is stored in the library. However Sun teaches an application program interface (API) (see Title and chapter 1 → Introduction to Java 3D), which is a set of routines which makes it easier to program by

providing all the building blocks. Libraries are particularly useful for storing frequently used routines because you do not need to explicitly link them to every program that uses them.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to store the used instance in the library for the purpose of avoiding having to explicitly link frequently used routines to every program that uses them.

Claim 5

Sun further teaches the method wherein *the object is defined as a node in the library* (see chapter 1.6.1; see also Fig. 1-2).

Claim 6

Sun teaches the method wherein the step of identifying further comprises

including the assignable attribute and its initial value in a virtual instance node related to the object (see chapter 7.1 *et seq.* → a floating-point or integer value is associated with an attribute);

finding a predetermined attribute value for the identified assignable attribute from one or more nodes connected directly or indirectly with the node of the object (see chapter 6.2.1 *et seq.*; see also Fig. 6-2 → the new leaf node would reference the duplicated object node); and

replacing the initial value of the assignable attribute with the found predetermined attribute value (see chapter 6.2.1 *et seq.*; see also Fig. 6-2).

Independent Claim 7

Independent claim 7 is a system that incorporates substantially similar subject matter as independent claim 4, and is rejected along the same rationale.

Claim 8

Claim 8 is a system that incorporates substantially similar subject matter as claim 5, and is rejected along the same rationale.

Claim 9

Claim 9 is a system that incorporates substantially similar subject matter as claim 6, and is rejected along the same rationale.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6559842 B1	USPAT	20030506	Deering, Michael F. et al.
US 6553563 B2	USPAT	20030422	Ambrose, Jesse et al.
US 6628277 B1	USPAT	20030930	Deering, Michael F. et al.
US 6459429 B1	USPAT	20021001	Deering, Michael F.
US 6326964 B1	USPAT	20011204	Snyder, John M. et al.
US 5720018 A	USPAT	19980217	Muller, Hans et al.
US 20020063704 A1	US-PGPUB	20020530	Sowizral, Henry et al.
US 20020060678 A1	US-PGPUB	20020523	Sowizral, Henry et al.
US 6734852 B2	USPAT	20040511	Sowizral, Henry et al.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Nguyen-Ba whose telephone number is (703) 305-8776. The examiner can normally be reached from 10 am - 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (703) 305-9792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PNB

JOSEPH FEILD
SUPERVISORY PATENT EXAMINER